Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid CMB control number.

	Substitute	e for form 1449A/PTC)	•	Complete if Known		
					Application Number	10/137,898 10/809/69	
	INFO	RMATION	DIS	CLOSURE	Filing Date	MAY 2, 2002	
	STAT	TEMENT B	Y A	PPLICANT	First Named Inventor	FRANK P. UCKERT ET AL.	
	_	•			Group Art Unit	1711	
_		(use as many she	ets as	necessary)	Examiner Name	UNKNOWN	
	Sheet	1	of	1	Attorney Docket Number	PE0667 US NA	

•				U.S. PATE	NT DOCUMENTS	
Examiner	Cite	Document Number		Publication Date	Name of Patentee or	Pages, Columns, Lines, Where
initials *	No.1	Number -	- Kind Code ² (if known)		Applicant of Cited Document	Relevant Passages or Relevant Figures Appear
les		US-	5,777,070 A	07/07/1998	INBASEKARAN ET AL.	
le		US-	5,998,045 A	12/07/1999	CHEN ET AL.	
		US-				
		US-`				
	•	US-				
		US-			· _	
		.U\$-				
		US-				
		US-				
		US-				
		US-				
ĪĪ		US-				
		US-				
		US-				
		US-				
		US-				
		US-				
		US-				
	•	US -				
		US -				

·				FORE	GN PATENT D	OCUMENTS		
- Examiner	Cite No.1	Foreig	Foreign Patent Document			Name of Patentee or	Pages, Columns, Lines, Where	
Initials*		CountryCode ³	Number ⁴	Kind Code ⁵ (if known)	Publication Date MM-DD-YYYY	Applicant of Cited Document	Relevant Passages or Relevant Figures Appear	T
la		wo	99/54943	A1	10/28/1999	DOW CHEMICAL CO.		ΙC
		wo	00/53656	A1	09/14/2000	CAMBRIDGE DISPLAY TECHNOLOGY LTD		
loc		wo	00/55927	A1	09/21/2000	CAMBRIDGE DISPLAY TECHNOLOGY LTD		Г
.]].						
1					1.	•		
				[Ш
				1				
					7			
		,						Ш

Date

Considered

3/15/06

Examiner

Signature

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the Individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the tow-letter code (WIPO Standard ST.3). ¹ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁴ Applicant is to place a check mark here if English language Translation is attached.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a ward CMB control number.

Substitu	ite for form 1449A/PT	· ·		Complete if Known
			Application Number	49/137,898 10/109/69
		DISCLOSURE	Filing Date	MAY 2, 2002
STA	TEMENT B	Y APPLICANT	First Named Inventor	FRANK P. UCKERT ET AL.
			Group Art Unit	1711
	(use as many sh	eets as necessary)	Examiner Name	UNKNOWN
Sheet	1	. 1	Attorney Docket Number	PE0667 US NA

				U.S. PATE	NT DOCUMENTS	
Examiner Initials *	Cite No.1		cument Number - Kind Code ² (if known)	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
100		US-	5,708,130 A	01/13/1998	WOO ET AL.	·
		US-	6,169,163 B1	01/02/2001	WOO ET AL.	
Lee		US-	6,204,515 B1	03/20/2001	BERNIUS ET AL.	
L`		US -				
		US -				
		US-				
		US -	··			
		US-				
		US -			<u> </u>	·
		US-				7
		US -				
		US -				
		US -				
		US -				
		US -				
		US -			•	
		US -			·	
L		us -				
		US-				
	1.	US -				

Examiner	Cite	FOREIC Foreign Patent Document					Pages, Columns, Lines, Where	г
Initials*	No.1	CountryCode ³	Number ⁴	Kind Code ⁵ (<i>if</i> known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Relevant Passages or Relevant Figures Appear	7
								ſ
				 				Ī
				 		·		
				 				_
								_!
	_							ᆛ
				 				Į
							-	÷
							<u> </u>	٢

^{*} EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

¹ Applicant's unique chation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the tow-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁴ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Substitute for form 1449B/PTO

INFORMATION DISCLOSURE

PTO/SB/08b (08-03)

Complete if Known

10/809,169

March 25, 2004

Approved for use through 08/30/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Application Number

Filing Date

STAT	EME	NT BY	APPLI	CANT	First Named Inventor	Frank P. Uckert Et. Al.	
					Art Unit	1713	
(Use as many sheets as necessary))	Examiner Name	Unknown	
Sheet		1	of	1	Attorney Docket Number	PE0667USDIV2	
				NON PATE	NT LITERATURE DOCUMENTS		
Examiner Initials*	Cite No.1	Include name magazine,	e of the aut journal, se	thor (in CAPIT/ erial, symposiu	AL LETTERS), title of the artic m, catalog, etc.), date, page(s and/or country where publis	cle (when appropriate), title of the item (book, s), volume-issue number(s), publisher, city shed.	T²
he		COWE	ELL, ALLA nemistry,	AN B. ET AL., 17, 1981, 345	Fluoroalkylation of Aroma 5-356, Elsevier Sequoia S.	atic Compounds, Journal of Fluorine A., Lausanne, The Netherlands	
4		KAMIG/ Compor	unds with	Perfluoroalka	AL., Direct Perfluoroalkyla anesulfonyl Chlorides Cata Chem. Soc.Perkin Trans.,	ation of Aromatic and Heteroaromatic alysed by a Ruthenium (II) Phosphine 1, 1994, 1339-1346	
			,				

L	<u> </u>			
Examiner Signature	lo-Oh.	Date Considered	3/15/06	

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not

^{*}EXAMINER: Initial if reference considered, whether or not claude is a conformation with MPEP 609. Draw line through claude is the considered. Include copy of this form with next communication to applicant:

1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450.

DONOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

SEP 1 6 2004 2

PTO/SB/08A (08-03)
Approved for use through 07/31/2006. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 1 of 2

	Complete if Known	
Application Number	10/809,169	
Filing Date	March 25, 2004	
First Named Inventor	Frank P. Uckert et al.	
Group Art Unit	1714	
Examiner Name	Unknown	
Attorney Docket Number	PE0667USDIV2	

				U.S. PATE	NT DOCUMENTS		
Examiner Initials *	Cite No.1		cument Number - Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	
		US -	4,508,639	04-02-1985	Camps et al.		
Se.		US -	5,621,131A	04-15-1997	Kreuder et al.		
-		US -	5,814,244A	09-29-1998	Kreuder et al.		
		US-	5,821,002A	10-13-1998	Ohnishi et al.		
_		us -	5,856,434A	01-05-1999	Stem et al.		
		us -	5,962,631A	10-05-1999	. Woo et al.		
		US	5,900,327A	05-04-1999	Pei et al.		
		US-	6,309,763 B1	10-30-2001	Woo et al.		
		US-	6,353,083 B1	03-05-2002	Inbasekaran et al.		
		US-	6,541,602 B1	04-01-2003	Spreitzer et al.		
\neg		US -	6,653,438 B1	11-25-2003	Spreitzer et al.		
be		US-	6,605,373 B1	08-12-2003	Woo et al.		
		US -					
		US -					
		US -					
		US -					
		US -					
		US-					
		US -	·- ·				
		US -					

		FOREIG	N PATENT D	OCUMENTS	·	
Examiner	Cite	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or	Pages, Columns, Lines, Where Relevant Passages or Relevant	
Initials*	No.1	CountryCode ³ Number ⁴ Kind Code ⁵ (if known)		Applicant of Cited Document	Figures Appear	Te
Lee		EP 0 259 229 B1	09-02-1987	Makromolekulare Chemie		
		EP 0 956 312 B1	01-29-1998	JSR Corporation		
De		WO 01/07502 A2	02-01-2001	Cambridge Display Techn		
·	 					
					• • • • • • • • • • • • • • • • • • • •	

Examiner Signature Date Consider	dered 8/15/06
----------------------------------	---------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. \(^1\) Applicant's unique citation designation number (optional). \(^2\) See Kinds Codes of USPTO Patent Documents at www.uspto.co/ or MPEP 901.04. \(^3\) Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). \(^5\) For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. \(^5\) Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. \(^6\) Applicant is to place a check mark here if English language Translation is attached.

Institution of Information is entering.

This collection of Information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandris, VA 22313-1450.

Complete if Known

Approved for use through 07/31/2006. OMB 0851-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449A/PTO

Signature

			Application Number	10/809,169	
		ON DISCLOSURE	Filing Date	March 25, 2004	
STAT	EMEN	T BY APPLICANT	First Named Inventor	Frank P. Uckert et al.	
		•	Group Art Unit	1714	
(us	e as man	y sheets as necessary)	Examiner Name	Unknown .	
Sheet	Sheet 2 of 2 Attorney Docket Number PE0687USDIV2				
		OTHER PRIOR ART N	ON PATENT LITERA	TURE DOCUMENTS	_
Examiner Initials *	Cite No.1	the item (book, magazine, jour	CAPITAL LETTERS), title nal, serial, symposium, ca publisher, city and/or cou	of the article (when appropriate), title of stalog, etc.), date, page(s), volume-issue ntry where published.	T²
4		material, and for display elements	d polymer useful as an orgar in television monitor and illun act, 08-13-2000, Aventis Res	nic semiconductor or an electroluminescence nination technology contains fluorene building & Technologies Gmbh	
		JP 2000319272, (Diarylamino) furan electron hole transport	analogues with improved sta or photosensitive materials,	ability, useful pharmaceutical intermediates and Abstract, 04-21-2001, Tosoh Corp	
		JP 08157575, Carrier transpr electroluminescen	ort polymers – useful as carrice devices, Abstract, 10-25-1	er transport materials in organic thin film 998, Toppan Printing Co. Ltd.	
		JP 2000143778, Display element of emitting compound as colo	such as cathode ray tube and r developing materials, Abstra	l light emitting diode, comprises specified light act, 10-06-2000, Samsung Denkan KK	
		JP 10273522, Production of phengroup-containing compounds in pre	ylene group-containing copol- esence of catalysts containing 1999, Nippon Gosel Go	ymers – comprises copolymerizing phenylene g transition metal compounds, Abstract, 01-13- mu KK	
		JP 10273521, Production of phengroup-containing compounds in pro	ylene group-containing copol esence of catalysts containing 1999, Nippon Gosel Go	ymers – comprises copolymerizing phenylene g transition metal compounds, Abstract, 12-23- mu KK	
		JP 03028220, Electrochromic elements derived from fl	ents for display or optical shie uorene, Abstract, 09-28-199	eld glass – contg. film of polyphenylene polymer 3, Idemitsu Kosan Co. Ltd.	
		JP 03017120, Polyphenylene polymor electrochemical-oxidative polyme	ers used as conductive mate rizing of specified fluorene de Ltd.	rial or display material are produced by chemical crivs, Abstract, 09-28-1993, Idemitsu Kosan Co.	
		JP 02269734, New polyphenylene-h	ype polymer prepd. By oxidn. 28-1993, Idemitsu Kosan	Polymerization of fluroene derive., Abstract, 09-Co. Ltd.	
Le		KR 99057430, Fluorene-based a electroluminescence device u	alternating statistical copolym sing the same, Abstract, 07-	er containing multi-luminescence groups and 15-1999, Korea Adv Inst Sci & Technology	
<u> </u>					
Examine		1-00.	Date Consider	red 3/15-/06	

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the Individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Petent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

PTO/SB/08A (08-03)
Approved for use through 07/31/2008. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Complete if Known

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

ubstitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Application Number 10/809,169

Filling Date MARCH 25, 2004

First Named Inventor FRANK P. UCKERT

Group Art Unit 1714

Examiner Name UNKNOWN

(use as many sheets as necessary)

Sheet 1 of

Attorney Docket Number PE0667US DIV2

U.S. PATENT DOCUMENTS						
Examiner Initials *	Cite No.1		cument Number - Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
1x		US -	5,777,070 A	07-07-1998	Inbasekaran et al.	
Ī		US-	5,807,974 A	09-15-1998	Kim et al.	
Lie		US-	5,876,864 A	03-02-1999	Kim et al.	
		US -				
		US -				
		US-				
		US-				
		us -				
		US -				
		US-				
		US-				
		US -				
		US -				
		US -				
		US -				
		US -				
		US -				<u> </u>
		US -				
		US-				
		US -				

		FOREIC	N PATENT D	OCUMENTS	. <u> </u>	
Examiner	Cite	Foreign Patent Document	Publication Date	Name of Patentee or	Pages, Columns, Lines, Where Relevant Passages or Relevant	
Initials*	No.1	lo.1 CountryCode3 Number4 Kind Code5 (if known) MM-DD-YY		Applicant of Cited Document	Figures Appear	
lee		WO 01/77203 A2	10-18-2001	Unlax Corporation		
7		WO 02/066537 A1	08-29-2002	Cambridge Display Techn		
		WO 01/81294 A1	11-01-2001	Sony International GmbH		
	•	WO 01/42331 A1	06-14-2001	Cambridge Display Tech & Max Planck Inst for Poly		
		WO 00/46321 A1	08-10-2000	The Dow Chemical Co.		
		WO 00/22027 A1	04-20-2000	Axiva GmbH		
\neg		WO 99/54385 A1	10-28-1999	The Dow Chemical Co.		
		WO 00/53656 A1	09-14-2000	Cambridge Display Techn		
tee	-	WO 00/55927 A1	09-21-2000	Cambridge Display Techn		

Examiner Signature	Date Considered	3/15/06
		· · · · · · · · · · · · · · · · · · ·

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. \(^1\) Applicant's unique citation designation number (optional). \(^2\) See Kinds Codes of USPTO Petent Documents at <a href="https://www.uspto.com/wwww.uspto.com/www.uspto.com/www.uspto.com/www.uspto.com/www.uspto.

tanguage Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

APR 2 5 2005 APR 2	U.S. Patent a uired to respond to a collection	PTO/SB/08b (08-03) Approved for use through 06/30/2008. OMB 0651-0031 and Trademark Office; U.S. DEPARTMENT OF COMMERCE of Information unless it contains a valid OMB control number.		
BADB Form 1449B/PTO	Complete If Known			
	Application Number	10/809,169		
INFORMATION DISCLOSURE	Filing Date	March 25, 2004		
STATEMENT BY APPLICANT	First Named Inventor	Frank P. Uckert Et. Al.		
	Art Unit	1714		
(Use as many sheets as necessary)	Examiner Name	Unknown		

Sheet

2

of

Attorney Docket Number PE0667USDIV2

		NON PATENT LITERATURE DOCUMENTS		
Examiner Initials*	Cite No. ¹			
lac		KOREAN PATENT ABSTRACTS, KR 00245841 B1, Fluorene-Based Alternating-Statistical Copolymer Containing Multi-Luminescence Groups and Electroluminescence Device Using The Copolymer, 12-01-1999, Korea Institute of Science and Technology		
KREYENSCHMIDT M. et al., Thermally Stable Blue-Light-Emitting Copolymers of Poly(alkylfluorene), Macromolecules, 1998, 1099-1103, 31, American Chemical Society				
les		LEE, JEONG-IK et al., Light-emitting electrochemical cells based on poly(9,9-bis(3,6-dioxaheptyl)-fluorene-2,7-diyl), Synthetic Metals, 2000, 195-197, 111-112, Elsevier Science S.A.		
			E	
•	***************************************			
				
Examiner		Date Considered Turloh		

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete uncluding gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.